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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/526,052 | 08/01/2005 | Gerd K Binnig | CH920020028US1 | 1146 |
| 54856 | 7590 | 06/23/2006 | EXAMINER | |
| LOUIS PAUL HERZBERG 3 CLOVERDALE LANE MONSEY, NY 10952 | | | RAEVIS, ROBERT R | |
| | | | ART UNIT | PAPER NUMBER |

2856

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/526,052

Applicant(s)

BINNIG ET AL.

Examiner

Robert R. Raevis

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 14-19 is/are rejected.
- 7) ☒ Claim(s) 6 and 9-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6=14-06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-5,7,8,14,15,16,17,18,19 are rejected under 35 U.S.C. 102(b) as being anticipated by Abraham et al.

As to claims 1-3,14,17,18, Abraham et al teach (Figure 2) a system, including: spinning disk (article); heater head whose resistance varies with temperature (p. 3998, left hand col.); an edge defined between the flat top surface of the article and either the bump or pit; wherein, as the article undergoes movement the edge moves relative to the heater producing a variation in heat loss from the heater and the corresponding variation in resistance of the heater.

As to claims 4,19, note the shape of the grids in Figure 9.

As to claims 5,7,19, the heater will overlap, and have its bottom surface parallel to the top, planar surface of the disk at some time. (Look at Figure 2, were the head moves parallel to the surface of the disk, and where the defined edged above are located on the most planar surface of the disc.)

As to claim 8, note the bump in Figure 2. It is this bump that defines one of the edges as described above.

As to claim 15, there is a slot between each of the 18 lines in Figure 9. Just look at Figure 9, and see that there are two raised lines, the region between being a depression like a slot.

As to claim 16, each one of the lines 18 of Figure 9 is shaped like a spoke.

As to Applicant's **REMARKS**, consider the following:

As to p. 12, lines 5-6, the "spinning magnetic disc" rotates on a plane. The "AC change" (p. 3998, left col., second paragraph) is indicative of movement of a disc with pits/bumps. When there is an AC change, there is a detection of movement. When that same disc is not providing for an AC change, there is not movement. Besides, the reference teaches everything in the body of this claim.

As to p. 12, line 7, the intersection of the bump (and pit) with the flat surface is an edge.

As to p. 12, lines 10-12, heat is effectively directed to the disc, and to that extent the heater faces the disc.

As to p. 12, lines 15-16, Applicant is not addressing the applied rejection.

As to p. 12, lines 18-19, see p. 3998, left para, top 5 lines.

As to p. 12, line 19, heat is produced at the head (p. 3998, top 5 lines), and the resistance varies (p.3998, left hand col., last para).

As to p. 13, top three lines. Please note that the movement recited in claim 2 is not claimed as being the "movement" (of claim 1) that is detected in claim 1. The claim is a bit broader than what is argued. Though the reference employs a "spinning disk", the disc (of Figure 2) is horizontal, and moves linearly when the disc housing is displaced, even slid/pushed on a surface.

As to p. 13, lines 11-17; Abraham senses pit and bumps, and Figure 9 illustrates additional bumps. The grids are elongated, having a length and width.

Claims 6,9-13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'R. A. Z. V. I. R.'.

RAZVIR